

WHAT IS CLAIMED IS:

1. A method for manufacturing a reduced metal, comprising:

thermally reducing a metal oxide including a carbonaceous reductant disposed on a hearth moving in a reducing furnace;

wherein the reducing furnace comprises a plurality of primary burners for supplying fuel and primary combustion air, and a plurality of secondary combustion burners for supplying secondary combustion air; and

wherein the primary combustion air and/or the secondary combustion air is oxygen-enriched air, the oxygen concentration in the primary combustion air supplied from at least one of the plurality of primary burners being controlled to be lower than the oxygen concentration in the secondary combustion air.

2. The method for manufacturing a reduced metal according to claim 1, wherein the CO concentration in the atmospheric gas in the furnace in the vicinity of at least one of the plurality of primary burners is less than 2 volume percent.

3. The method for manufacturing a reduced metal

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Related Pending Application

Related Case Serial No: 10/763,239

Related Case Filing Date: 01-26-04

according to claim 1, wherein the CO concentration in the atmospheric gas in the furnace in the vicinity of at least one of the plurality of primary burners is less than 4 volume percent.

4. The method for manufacturing a reduced metal according to claim 1, wherein a degree of reduction represented by the formula $(CO+H_2)/(CO+CO_2+H_2+H_2O)$ in the atmospheric gas in the furnace in the vicinity of at least one of the plurality of primary burners is less than 0.05.

5. The method for manufacturing a reduced metal according to claim 1, wherein at least one of the plurality of primary burners has an air ratio of 1.0 or less.

6. The method for manufacturing a reduced metal according to claim 1, wherein the plurality of primary burners has different air ratios.